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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,104	02/27/2004	Hans Leonhard Ohrem	BASF-0003-D01 (MERCK-2322)	5071
23599 7590 10/04/2007 MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			EXAMINER BHAT, NINA NMN	
			ART UNIT 1764	PAPER NUMBER
			MAIL DATE 10/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/787,104

**Applicant(s)**

OHREM, HANS LEONHARD

**Examiner**

N. Bhat

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant is required to update the continuity status of the application in the specification on the first line of the specification. This application is a Divisional application of 09/979,921 filed February 28, 2002 now US Patent 6,733,738. Applicant is also advised to note the discrepancy listed on the Bib sheet and reconcile.
2. The disclosure is objected to because of the following informalities: Applicant is required to include the heading "Brief Description of the Drawing" and also include a list and description of the Figures. Appropriate correction is required.
3. The information disclosure statement (IDS) submitted on February 27, 2004 has been considered. The submission is in compliance with the provisions of 37 CFR 1.97.
4. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach and/or suggest an apparatus for the continuous product of  $\text{NaDCl}_4$  where D is either aluminum or iron, where the device comprises a first reaction vessel for containing the melt of aluminum and/or iron, a feed device which is in operative connection with a gaseous metal chloride located above the reaction vessel and a collection device for the gaseous metal chlorinated product is collected from the top of the reaction vessel, and a second reaction vessel for containing sodium chloride in solid form which reacts with the gaseous metal chloride from the collection device within the second reaction vessel, the reaction produces a  $\text{NaDCl}_4$  salt. The prior art specifically to Underwood, Jr teach providing an apparatus for making anhydrous aluminum chloride which uses a vessel which contains molten aluminum and in operative connection provides a lance or means for introducing chlorine gas. There

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is no subsequent device or reactor, which then reacts the aluminum chloride with a sodium chloride in a second reactor to product  $\text{NaAlCl}_4$  metal, salts. In Koump, a device is described which involves de-tinning molten iron by passing chlorine gas through the molten iron bath to for  $\text{FeCl}_3$ , there is no subsequent device or reactor which then reacts the aluminum chloride with a sodium chloride in a second reactor to product  $\text{NaFeCl}_4$  metal salts. The devices as claimed has not been taught or fairly suggested either singularly or in combination by the prior art.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stewart et al. teach a salt based melting process for melting and reclaiming aluminum from aluminum scarp, which includes heating a molten salt in the heating bay, mixing the heated salt with aluminum scrap. Dugan teaches a process for purifying aluminum chloride by containing aluminum chloride with a bath containing at least one chloroaluminate for a time sufficient to remove the impurities therefrom and recovering the purified aluminum chloride in the vapor phase of the chloroaluminate bath.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. Bhat whose telephone number is 571-272-1397. The examiner can normally be reached on Monday-Friday, 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



N. Bhat  
Primary Examiner  
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